# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Assessment of difference of postpartum depression among	
	caesarean and vaginally delivered women at six-week follow-up in	
	the hospitals in Pune District, India: An observational cohort study	
AUTHORS	Doke, Prakash; Vaidya, Varsha; Narula, Arvinder Pal Singh;	
	Datar, Manjiri; Patil, Archana; Panchanadikar, Tushar; Wagh,	
	Girija	

# **VERSION 1 – REVIEW**

REVIEWER	Lim, Eunjung University of Hawaii at Manoa, Quantitative Health Sciences
REVIEW RETURNED	08-May-2021

GENERAL COMMENTS	Comments Thanks for giving me an opportunity to review the manuscript. This study compared the proportion of postpartum depression at six weeks among cesarean delivered and vaginally delivered women and to assess its association with some sociodemographic factors. My comments are below.
	Major Comments  1. Investigating the effect of mode of delivery on postpartum depression (PPD) is not novel and many studies were conducted in this area. Although it is not novel, if this is the first study conducted as large size, the significance of the study still can be justified based on a multisite large study conducted in India. The introduction needs to be reorganized to more emphasize this aspect in the Introduction. Suggested: Significance of PPD (consequence, problem of PPD) □ literature on PPD among cesarean deliver (few studies on obstetric factors)> gaps in literature (focus on India − lack of large studies, no attention on maternal mental health, baby girl)> study objectives
	2. Analysis has some issues. i) Multivariable logistic regression analysis was not described properly in the Results section. Interpretation of adjusted odds ratio should be added in the text, not only Abstract. ii) Before reporting adjusted odds ratio, bivariate analyses (chi-square test or univariable logistic regression) between PPD and the socio-demographic variables as well as a mode of delivery should be implemented because the study aim is to compare PPD between cesarean delivery and vaginal delivery and assess its association with socio-demographic factors. iii) Table 1 shows there may be potential interaction effects between mode of delivery and age group, mode of delivery and annual

income, and mode of delivery and occupation. You need to check where interaction terms are significant. iv) The categorization of EPDS seems more arbitrary. To argue the cutoff point of 6 can be considered for screening women for delivery, you should prove from a valid test. Table 3 does not really prove 6 can be used as the cutoff point. I suggest you compute sensitivity, specificity, and accuracy (or area under the curve) at different cut-off points.

3. Discussion should be more organized. Your main finding should be discussed first, not the secondary findings. I suggest the following order: a brief summary of the study finding --> discussion on the main finding (i.e., the risk of cesarean delivery on PPD) with the comparison of other studies --> discussion on other findings (cutoff points of EPDS, other risk factors) --> clinical implication --> limitation and strength.

# Other Minor Issues

#### Abstract

- 1. P3 L28-20: "and two teaching hospitals one government and one private" --> A period is missing at the end of the sentence and a hyphen or colon is missing between 'hospitals' and 'one.'
- 2. P3 L30-31: "the" is missing before "participating hospitals..."
- 3. P3 L33-36: The authors said age and parity were matched but this was never mentioned in the Methods section. Please describe this in the Methods section.
- 4. P3 L40-43: Chi-square test is a test, so it provides a chi-square value and p-value. "Chi-square test...was calculated" is incorrect. How did you compute the adjusted odds ratio? Didn't you use logistic regression? Please clarify this. I think "adjusted odds ratio using multivariate analysis" should be changed to "adjusted odds ratio was calculated using multivariable logistic regression analysis" or "Chi-square test and logistic regression were conducted to assess the effect of delivery mode on postpartum depression.
- 5. P3 L49-50: Please be consistent in reporting decimal points. That is, 1.104 --> 1.10.

Strengths and limitations of this study

P4 L24: Since the study population (i.e., women who delivered a baby in Pune district, India) is different from the population in Pune district (i.e., about 10 million people including men and women in all age groups), they should remove "representing about 10 million population."

P4 L29: Please finish the sentence. "having a higher risk for PPD."

P4 L36: You include a private hospital. Please rewrite the sentence.
Introduction

P5 L26-27: 'is' should be 'are.'

P5 L40-43: The sentence 'Edinburgh Postnatal...for assessment' does not fit well here. It is not connected to the previous and following sentences. Please remove or move to Method section. P5 L45-46: PPD was not defined. Please define when the word 'postpartum depression' was used at the first time in L28-31. Material and Methods

P7 L47-48: How many non-teaching government hospitals? Were there any differences in the rate of cesarean delivery and socio-demographic variables between the mode of hospitals? This information may need to be added to Table 1. You may need to consider a multilevel analysis on PPD because patients are nested within hospitals — women who used the same hospital may have similar characteristics (e.g., similar insurance type, similar income level).

P8 L45: "Participants" section needs to be moved before the "Follow-up" section. Matching by age and parity is missing. Please explain how you matched vaginal delivery to cesarean delivery.

P9 L17-18: Please briefly describe "Kuppuswamy's classification" for those who do not know this method.

P9 L26: It would be better for you to start a new paragraph from "For each woman, depression score..."

P9 EPDS: What is the reliability of the EPDS in your study? Please report Cronbach's alpha. Does every participant respond to all 10 items? Is there any partial missing (at least one item missing) among the 10 items? If so, how did you handle this missing?

P9 L40: 'and' is missing between 'the participants,' and 'detailed obstetric history"?

P10 L33: Which analysis was used to calculate the adjusted odds ratio? Was it a multivariable logistic regression?

P10 L37-38: Do you mean "Participant women were not involved in developing study design"? Anyway, this is somewhat obvious. I think this section does not provide useful information.

Ethnics: Research ethics are not addressed.

### Results

P10 L49-52: Please add the exact number (e.g., n=xxxxx) to clarify the percentages for exclusion.

P11 L8-10: Were there any significant differences in the mode of follow-up by PPD?

P11 L18-20: How many people did you lose follow-up?

P11 L26-27: Were there any significant differences between urban and rural? Shouldn't the comparison be in Table 1?

P11 L47-48: The missing rate is pretty high in delivery. This can cause bias so this needs to be mentioned as a limitation.

P12 L3-6: "the proportion of cesarean delivered women who received a score of six and above was higher than that of vaginally delivered women" would be better?

P12 L7-11: This is never mentioned in the study objectives and Method section. If you want to keep this, this should be mentioned before. Again, clarify the unit. The higher is not score but the proportion in the higher score groups.

P12 L12-15: Table 4 should be described based on the odds ratios of the significant variables. The abstract is more detailed than Results, which is unusual.

#### Discussion

P12-P16: Please see my main comment about Discussion. P16: Since a history of depression may affect postpartum depression, you need to mention this (did not include potentially important risk factors so it may cause bias) as a limitation.

### Tables and Figures

- 1. Tables should be self-explanatory. Please use a footnote to define acronyms used in each table. E.g., LSCS, EPDS, EI, BPL, SSC.
- 2. Need a table for the bivariate association between sociodemographic variable and PPD.
- 3. Table 1: Why age is significantly different between cesarean delivery and vaginal delivery? This should be balanced if matching was working Abstract says age and parity were matched.
- 4. Table 1: The missing rate for annual income is pretty high.
- 5. Table 1: Although it is clear from the table, please give a symbol to indicate the number in parenthesis is a percentage. Asterisks are not needed if you report a p-value.
- 6. Table 2: There is no SSC in the table. Please remove it. I think this can be combined with Table 1 or the new table I mentioned in #2
- 7. Table 3: If you use the cutoff point of 10, there is no significant difference between the mode of delivery (Em. LSCS and El. LSCS).
- 8. Table 4: Add "(95% confidence interval)" in 'Adj. Odds Ratio' column and give space between odds ratio and 95% confidence interval.
- 9. Table 4: When multivariable logistic regression is used to adjust for independent variables, observations with missing in any of a variable won't be included. Even though the "Score" columns are

useful, this information should be moved to another table which is a bivariate association with PPD.
10. For Tables 1 and 4, please identify the unit of Age.
11. Figure 2: Please add information at which stage age and parity were matched and drop-out information at each stage with information. Please refer CONSORT flowchart diagram (http://www.consort-statement.org/consort-statement/flow-diagram).

REVIEWER	Matsumura, Kenta University of Toyama, Toyama Regional Centre for Japan
	Environment and Children's Study
REVIEW RETURNED	25-May-2021

### **GENERAL COMMENTS**

The authors examined the association between cesarean section and postpartum depression in India. The data is potentially helpful, but there are several concerns to be addressed. First, the data need to be reanalyzed. Second, the authors should arrange the order of subsections in this section. Finally, the manuscript would benefit tremendously from language editing by a professional editor familiar with this field. Below are my comments. Abstract:

Please define the cut-off values of the EPDS score in "Main outcome measures" clearly.

I do not understand why the authors state, "A cut off point of six can be considered for screening women after delivery." No evidence directly supports this statement. In addition, this is beyond the aim of the study. Please remove this sentence. Material and Methods:

Overall, the authors should arrange the order of subsections in this section. Usually, the reader reads a manuscript one by one from the beginning. Therefore, the order that requires the potential readers to go back and forth in the text should be avoided. When were the women recruited in their pregnancy or postpartum period? Please provide this information.

"desired sample size was achieved": How did the authors calculate this size. Please add detailed information to the manuscript with relevance to the matching procedure.

The "Participants" section should be moved to before the "Follow-up" section.

What language version of the EPDS was used? Please report the number of participants using each version.

The reviewer knows the existence of the Hindi version (Banerjee et al., 2000, Int J Soc Psychiatry, 46, 74-75.). Please refer to the literature of the translated version of the EPDS and describe the cut-off value of postpartum depression and its psychometric properties, such as alpha, sensitivity, and specificity value. The authors state, "The woman with a cut-off score >10 was considered as having postpartum depression." Direct evidence to support this is needed.

The authors should include the "Bias" and "Data source/measurement" sections in the "Variables" section.

What were the rates of the missing value and dropout? How did the authors minimize such a bias? Please report them. "Study Size" --> "Sample Size?" This section also should be presented earlier in the text. How did the authors select the covariates? By what criteria? Please specify. Child sex might serve as a mediator rather than a confounder. In this case, please remove child sex from the adjusted model, though described as the 2nd objective in the "Introduction." Results: The data need to be reanalyzed. Please compare the EPDS score of women with and without cesarean section using a t-test (or a Mann-Whitney U test) and report each mean (median) value. Alternatively, clearly show the theoretical background or literature using the present categorization (0, 1-5, 6-9, ≥10). Please provide a short sentence on whether excluded participants differed significantly from those included in the final analytical This section is currently very brief. I would like to see a summary of the results written out, not just presented in the tables. Discussion: "A score of 6 and above by EPDS..." guoted in "WHO. [Ref. 6]" seems to be based on Nigeria study. Thus, this does not necessarily apply to the present study. Please refrain from recommending a new cut-off value of EPDS without obtaining a clinical diagnosis of postpartum depression simultaneously. Table 2: Does the description of "SSC" need? Table 3: What does "El." represent? Table 4: Please also show the crude (or unadjusted) odds ratios. The p values are unnecessary (95% CIs alone will do). Are confidence intervals (CIs) 95%? Please specify. Score --> EPDS score multivariate --> multivariable Figure 2: Please specify each reason for exclusion. The authors need to show this figure with relevance to the "Participant" section. Please incorporate the matching procedure used in the study into this figure. STROBE statement: Please fill in the form. The authors need to check the manuscript using this checklist.

· · · · · · · · · · · · · · · · · · ·	
Universidad Loyola Andalucia, Psychology	
31-May-2021	

GENERAL COMMENTS	Thank you for inviting me to review the paper "Comparison of	
	postpartum depression at six weeks among caesarean and	
vaginally delivered women in Pune District, India". This pa		
	aimed to address an important clinical issue – the impact of the	

mode of the delivery in the postpartum depression. I have read carefully and found that this study is very carefully created and developed. The followings are my comments:

- 1) Discussion: I suggest indicating in the discussion that the study missing some risk factors of postpartum depression as family violence or social support.
- 2) Discussion: Future research should be addressed for this very important topic.
- 3) Supplementary material: The STROBE checklist has not indicated the pages of the text for each item.

# **VERSION 1 – AUTHOR RESPONSE**

Reviewer 1 Comments	Author's response
The introduction needs to be reorganized to more emphasize this aspect in the Introduction. Suggested: Significance of PPD (consequence, problem of PPD) nbsp; literature on PPD among cesarean deliver (few studies on obstetric factors)> gaps in literature (focus on India – lack of large studies, no attention on maternal mental health, baby girl)> study objectives.	Introduction section modified as per suggestions.
Multivariable logistic regression analysis was not described properly in the Results section. Interpretation of adjusted odds ratio should be added in the text, not only	Given in results section as well in material and methods section.  Some details of table are mentioned in the script.
2. Before reporting adjusted odds ratio, bivariate analyses (chi-square test or univariable logistic regression) between PPD and the sociodemographic variables as well as a mode of delivery should be implemented because the study aim is to compare PPD between cesarean delivery and vaginal delivery and assess its association with socio-demographic factors.	Chis square test was applied for the variables given in table 1. However, there were no significance differences hence it was not included. As per comment, it is included now in results section.

3.	Table 1 shows there may be potential interaction effects between mode of delivery and age group, mode of delivery and annual income, and mode of delivery and occupation. You need to check where interaction terms are significant.	It is mentioned as above. Mode of delivery significantly affected outcome and is mentioned in results section.
4.	The categorization of EPDS seems more arbitrary. To argue the cutoff point of 6 can be considered for screening women for delivery, you should prove from a valid test. Table 3 does not really prove 6 can be used as the cutoff point. I suggest you compute sensitivity, specificity, and accuracy (or area under the curve) at different cut-off points.	Table two and three combined together and grouped scores are removed.
main findir secondary order: a br discussion cesarean of compariso other findir	n should be more organized. Your ng should be discussed first, not the findings. I suggest the following ief summary of the study finding> on the main finding (i.e., the risk of delivery on PPD) with the n of other studies> discussion on ngs (cutoff points of EPDS, other risk or clinical implication> limitation and	As per comment discussion is rearranged.
"and two teaching hospitals one government and one private"> A period is missing at the end of the sentence and a hyphen or colon is missing between 'hospitals' and 'one.'		Changed now.
"the" is mis	ssing before "participating ."	Changed now.
The authors said age and parity were matched but this was never mentioned in the Methods section. Please describe this in the Methods section.		Already it is there in the last sentence before follow-up.

: Chi-square test is a test, so it provides a chi-square value and p-value. "Chi-square testwas calculated" is incorrect. How did you compute the adjusted odds ratio? Didn't you use logistic regression? Please clarify this. I think "adjusted odds ratio using multivariate analysis" should be changed to "adjusted odds ratio was calculated using multivariable logistic regression analysis" or "Chi-square test and logistic regression were conducted to assess the effect of delivery mode on postpartum depression.	Changed as; Chi-square test and multivariable binary logistic regression were performed to assess the effect of delivery mode on postpartum depression.
Please be consistent in reporting decimal points. That is, 1.104> 1.10.	Changed now.
Since the study population (i.e., women who delivered a baby in Pune district, India) is different from the population in Pune district (i.e., about 10 million people including men and women in all age groups), they should remove "representing about 10 million population."	Removed.
. "having a higher risk for PPD."	Changed.
You include a private hospital. Please rewrite the sentence.	It is rewritten now.
'is' should be 'are.'	Modified now.
The sentence 'Edinburgh Postnatalfor assessment' does not fit well here. It is not connected to the previous and following sentences. Please remove or move to Method section.	Rewritten to show connectivity.
PPD was not defined. Please define when the word 'postpartum depression' was used at the first time in L28-31	Expansion given when PPD appeared first time.

How many non-teaching government hospitals? Were there any differences in the rate of cesarean delivery and sociodemographic variables between the mode of hospitals? This information may need to be added to Table 1. You may need to consider a multilevel analysis on PPD because patients are nested within hospitals – women who used the same hospital may have similar characteristics (e.g., similar insurance type, similar income level).	It is mentioned now. All except one were government hospitals. It is also a charitable hospital. Income is already considered. Hence, it may not be highly relevant.
Participants" section needs to be moved before the "Follow-up" section. Matching by age and parity is missing. Please explain how you matched vaginal delivery to cesarean delivery.	Participant section is now before follow-up section. It was already. Now it is just before follow-up section.
Please briefly describe "Kuppuswamy's classification" for those who do not know this method.	It is mentioned now.
It would be better for you to start a new paragraph from "For each woman, depression score"	Modified as per comment.
What is the reliability of the EPDS in your study? Please report Cronbach's alpha. Does every participant respond to all 10 items? Is there any partial missing (at least one item missing) among the 10 items? If so, how did you handle this missing?	From each site two personnel and additionally three from research team were trained. We did not perform inter-interviewer reliability. It is mentioned in the limitations. Now it seems difficult. The interviewer ensured that all questions are answered.  The authors and research team members regularly visited the sites and confirmed the contents.
'and' is missing between 'the participants,' and 'detailed obstetric history"?	Added now.
Which analysis was used to calculate the adjusted odds ratio? Was it a multivariable logistic regression?	It was multivariable binary logistic regression. It is clearly mentioned now.

Do you mean "Participant women were not involved in developing study design"? Anyway, this is somewhat obvious. I think this section does not provide useful information.	Changed now. It is kept as journals require it.
Ethnics: Research ethics are not addressed.	It is there.
Please add the exact number (e.g., n=xxxxx) to clarify the percentages for exclusion.	We enrolled eligible women, hence exact number for exclusion it difficult to retrieve. Hence probable figure as per interviewers' estimate is given.
Were there any significant differences in the mode of follow-up by PPD?	There was not significant difference.
How many people did you lose follow-up?	Given in figure 2
Were there any significant differences between urban and rural? Shouldn't the comparison be in Table 1	The comparison is needed. All hospitals where Caesareans are conducted are in municipal towns or municipal corporations. Almost all women gave local addresses. Hence, we did not attempt analysis.
The missing rate is pretty high in delivery. This can cause bias so this needs to be mentioned as a limitation.	The loss to follow-up was less than 10%. For various reasons women were not available for interview. In field study it is reasonable.
"the proportion of cesarean delivered women who received a score of six and above was higher than that of vaginally delivered women" would be better?	Changed.

This is never mostioned in the attack which is a	Mantion ad in material mathers are setting
This is never mentioned in the study objectives and Method section. If you want to keep this, this should be mentioned before. Included in methods section. Again, clarify the unit. The higher is not score but the proportion in the higher score groups.	Mentioned in material method section. Changed the wordings.
Table 4 should be described based on the odds ratios of the significant variables. The abstract is more detailed than Results, which is unusual.	As per comment, few sentences are added in the results (But conventionally one should avoid repetition in the tables and the script).
Since a history of depression may affect postpartum depression, you need to mention this (did not include potentially important risk factors so it may cause bias) as a limitation.	True. We did not obtain such history. It is mentioned in the limitations.
Tables should be self-explanatory. Please use a footnote to define acronyms used in each table. E.g., LSCS, EPDS, EI, BPL, SSC.	Done
Need a table for the bivariate association between socio-demographic variable and PPD. It was not the objective.	The table 1 is given for comparison between two groups. We calculated Chi square test to see the difference between the distribution of these characteristics and PPD. There was no association. Hence it was not mentioned. Now it is mentioned.
Why age is significantly different between cesarean delivery and vaginal delivery? This should be balanced if matching was working - Abstract says age and parity were matched.	The protocol for age matching was selection of a woman with a margin of 2.5 years on either side of age of the caesarean delivered woman. But mostly the women from control group were from lower side.

The missing rate for annual income is pretty high.	It is less than 10%. The women were unaware about the income.
Although it is clear from the table, please give a symbol to indicate the number in parenthesis is a percentage. Asterisks are not needed if you report a p-value.	Symbols given. Asterisks removed
There is no SSC in the table. Please remove it. I think this can be combined with Table 1 or the new table I mentioned in #2.SSC removed.	Corrected in all tables.
If you use the cutoff point of 10, there is no significant difference between the mode of delivery (Em. LSCS and El. LSCS).	Yes. It is mentioned. The two tables are clubbed together.
Table 4: Add "(95% confidence interval)" in 'Adj. Odds Ratio' column and give space between odds ratio and 95% confidence interval.	Added.
Table 4: When multivariable logistic regression is used to adjust for independent variables, observations with missing in any of a variable won't be included. Even though the "Score" columns are useful, this information should be moved to another table which is a bivariate association with PPD.	Agreed but number of tables will increase, hence continued. We had done analysis but as there was no association, it was not mentioned. Now it is mentioned.
For Tables 1 and 4, please identify the unit of Age.	Years added,
Figure 2: Please add information at which stage age and parity were matched and dropout information at each stage with information. Please refer CONSORT flowchart diagram .	The information included in figure 2

Reviewer 2 Comments	Author's response

Please define the cut-off values of the EPDS score in "Main outcome measures" clearly. I do not understand why the authors state, "A cut off point of six can be considered for screening women after delivery." No evidence directly supports this statement. In addition, this is beyond the aim of the study. Please remove this sentence.	Mentioned now. Removed.
When were the women recruited in their pregnancy or postpartum period? Please provide this information.	It is clearly mentioned now
"desired sample size was achieved": How did the authors calculate this size. Please add detailed information to the manuscript with relevance to the matching procedure.	It is already mentioned
The "Participants" section should be moved to before the "Follow-up" section.	Changed.
What language version of the EPDS was used? Please report the number of participants using each version.	It was in Marathi. It is already mentioned. All mothers knew the local language, Marathi.
Please refer to the literature of the translated version of the EPDS and describe the cut-off value of postpartum depression and its psychometric properties, such as alpha, sensitivity, and specificity value.	We validated the translation by a psychiatrist who was fluent in local language, Marathi. It was also validated language expert. It was pretested and few modifications were made. They were again confirmed from both the experts. All patients were not examined by a psychiatrist. Now calculating these statistics is difficult.

"The woman with a cut-off score >10 was considered as having postpartum depression." Direct evidence to support this is needed.	The most commonly used cut off point is 10. It is mentioned in the discussion and references are quoted. The sensitivity and specificity of cut-off point of 10 from a systematic review and meta-analysis is mentioned in the discussion section.
The authors should include the "Bias" and "Data source/measurement" sections in the "Variables" section.	The sequence is given as per standard STROBE statement.
What were the rates of the missing value and dropout? How did the authors minimize such a bias? Please report them.	Now they are given in figure 2. Mentioned in the discussion.
"Study Size"> "Sample Size?" This section also should be presented earlier in the text.	The sequence is given as per standard STROBE statement.
How did the authors select the covariates? By what criteria? Please specify.	It was consultative process among authors. Age, education, occupation, and income are usually selected covariates. In the context of PPD parity and mode of delivery were included. In India some studies have shown birth of a female child affects PPD, hence it was included. We missed inclusion history of depression and family problems.
Please compare the EPDS score of women with and without cesarean section using a t-test (or a Mann–Whitney U test) and report each mean (median) value. Alternatively, clearly show the theoretical background or literature using the present categorization (0, 1-5, 6-9, ≥10).	The groups have been removed. Distribution free Chi square is used.

Child sex might serve as a mediator rather than a confounder. In this case, please remove child sex from the adjusted model, though described as the 2nd objective in the "Introduction."	Sex of the child removed from table showing adjusted odds ratio.  One line mentioning chi square is inserted in results section.
Please provide a short sentence on whether excluded participants differed significantly from those included in the final analytical sample.	It is difficult now. We don't have data of not included women. But we believe that it must be similar.
This section is currently very brief. I would like to see a summary of the results written out, not just presented in the tables.	Given now in few sentences (But conventionally one should not repeat the finding in the script and tables).
"A score of 6 and above by EPDS" quoted in "WHO. [Ref. 6]" seems to be based on Nigeria study. Thus, this does not necessarily apply to the present study. Please refrain from recommending a new cut-off value of EPDS without obtaining a clinical diagnosis of postpartum depression simultaneously.	Modified accordingly.
Table 2: Does the description of "SSC" need?	Removed.
Table 3: What does "El." represent?	Explained.
Please also show the crude (or unadjusted) odds ratios. The p values are unnecessary (95% CIs alone will do). Removed. Are confidence intervals (CIs) 95%? Please specify. Specified. Score> EPDS score multivariate> multivariable.	When adjusted odds ratio figures are available there is no point in mentioning crude values. P values removed. 95% CI mentioned. Written as EPDS score. Multivariable word added.
Please specify each reason for exclusion. The authors need to show this figure with relevance to the "Participant" section.	Linked now.

Figure 2: Please incorporate the matching procedure used in the study into this figure.	Included.
STROBE statement: Please fill in the form. The authors need to check the manuscript using this checklist.	Attached now.

Reviewer 3 Comments	Author's response
Discussion: I suggest indicating in the discussion that the study missing some risk factors of postpartum depression as family violence or social support.	True, we have not included it. It is mentioned in the limitations.
Discussion: Future research should be addressed for this very important topic.	It is included now.
Supplementary material: The STROBE checklist has not indicated the pages of the text for each item. Attached now.	Attached now.

# **VERSION 2 – REVIEW**

REVIEWER	Lim, Eunjung	
	University of Hawaii at Manoa, Quantitative Health Sciences	
REVIEW RETURNED	11-Jul-2021	
GENERAL COMMENTS	Thanks for responding for the comments and my comments were adequately responded to. I have two more minor comments.	
	* Table 3: Remove binary. Logistic regression indicates that its outcome is binary.  * Table 3: Define abbreviation. E.g., EPDS, CI.	
	<u>-</u>	
REVIEWER	Matsumura, Kenta	

	University of Toyama, Toyama Regional Centre for Japan Environment and Children's Study
REVIEW RETURNED	15-Jul-2021

GENERAL COMMENTS	The manuscript was improved considerably. However, as mentioned in the previous round, please add appropriate literature to the following sentence: "We considered the most commonly
	used cut-off score of > 10 of a woman to identify as having postpartum depression."

# **VERSION 2 – AUTHOR RESPONSE**

Reviewer Comments	Response	Page number where changes are highlighted.
Reviewer: 1  * Table 3: Remove binary. Logistic regression indicates that its outcome is binary.  * Table 3: Define abbreviation. E.g., EPDS, CI.	The word binary has been removed from title of table 3.  The abbreviations have been defined below the table 3.	Page number: 28 Page number: 28
Reviewer: 2  "We considered the most commonly used cut-off score of > 10 of a woman to identify as having postpartum depression."	One reference deleted.  Three references added which clearly conclude that EPDS score 10 is most optimum for screening. It mentioned in the text.	Page number: 14 Page number: 24

All items from the checklist should be included in your manuscript. Please do not leave blanks and indicate any items that do not apply to your study design as 'Not Applicable'.	Checklist modified.	
-Please revise the title of your manuscript to include the research question, study design and setting. This is the preferred format of the journal.	Title revised.	Page number:1, 2 and 4
-Please revise the 'Strengths and limitations' section of your manuscript (after the abstract). This section should contain up to five short bullet points, no longer than one sentence each, that relate specifically to the methods. The results of the	The bullet about results is removed.	Page number: 3
study should not be summarised here (bullet point 3).	Added in the text.	Page number: 17
-In your ethics statement, please indicate whether or not participants provided informed consent for inclusion in the study.		